

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A personal identification apparatus comprising:
a storage device configured to store specific information pieces of a plurality of registered persons in order;

an extraction device configured to extract a specific information piece of an object person to be identified from a feature of the object person;

an identification device configured to identify the object person from the registered persons by comparing the specific information pieces of the registered persons with the specific information piece of the object person; and

a registered information operation device configured to sort ~~in the order~~ the specific information pieces of the registered persons, which is stored in said storage device, in order of increasing elapse time from a last identification of the object person or in order of decreasing frequency of identification thereof.

Claim 2 (Canceled).

Claim 3 (Previously Presented): The apparatus according to claim 1, wherein when said identification device fails the identification between the object person and each of the registered persons, said identification device executes retry using the specific information piece of the object person which is extracted by said extraction device.

Claim 4 (Previously Presented): The apparatus according to claim 1, wherein when said identification device fails identification between the object person and one of the registered persons, said extraction device extracts another specific information piece of the

object person which presents at a lower-order position than the specific information piece extracted from the object person, and said identification device compares the another specific information piece with the specific information piece of each of the registered persons to verify the specific information piece.

Claim 5 (Previously Presented): The apparatus according to claim 1, wherein when said identification device fails identification between the object person and each of the registered persons, said identification device executes retry using the specific information piece of the object person extracted by said extraction device and the specific information piece of each of the registered persons stored in said storage device.

Claim 6 (Previously Presented): The apparatus according to claim 1, wherein said extraction device comprises a face region detector device configured to detect a face region of the object person as the specific information piece of the object person, a facial part detector configured to detect facial parts of the object person based on face region image information obtained by said face region detector device, and a feature extraction device configured to extract a feature of the object person based on grayscale information which is extracted for each pixel from the face region based on positional information of the facial parts.

Claim 7 (Previously Presented): The apparatus according to claim 1, wherein said storage device stores respective personal information pieces including the specific information piece of the registered person, the dictionary, name of the registered person, registration number, registration date when these information pieces are stored in said storage device, and date/time and place of identification of the registered person.

Claim 8 (Previously Presented): The apparatus according to claim 1, which comprises a presentation device configured to present the information pieces stored in said storage device together with an order in which the information pieces are stored in said storage device.

Claim 9 (Previously Presented): The apparatus according to claim 1, wherein said registered information operation device sorts and updates information pieces read out from said storage device in accordance with any condition and sends sorted information to said storage device to store it therein.

Claim 10 (Previously Presented): The apparatus according to claim 1, wherein said registered information operation device comprises a control determination device configured to determine a sorting method for the information pieces stored in said storage device, compute a time required for determination of sorting, and change items of the information, and a sorting device configured to sort the information pieces in accordance with a sorting method determined by said control determination device, and transmit the sorted information pieces to said registered information storage device.

Claim 11 (Previously Presented): The apparatus according to claim 10, wherein said sorting device sorts the information pieces, which are arranged first in a registration order, in an ascending order of elapse times from the last identification of the object person and registered persons.

Claim 12 (Previously Presented): The apparatus according to claim 10, wherein said sorting device sorts automatically the information pieces at a predetermined time interval.

Claim 13 (Previously Presented): The apparatus according to claim 10, wherein said sorting device performs automatically the sorting when identification between the registered persons and the object person has been executed.

Claim 14 (Previously Presented): The apparatus according to claim 10, wherein said sorting device performs the sorting in accordance with request of an administrator.

Claim 15 (Previously Presented): The apparatus according to claim 1, wherein said registered information operation device includes a selector configured to select appropriately the registered person information pieces stored in said storage device depending on whether they are information to be identified.

Claim 16 (Previously Presented): The apparatus according to claim 1, wherein said storage device stores face information of the registered persons as the specific information pieces of the registered persons, said extraction device extracts the face information of the object person as the specific information piece of the object person, said identification device includes an ID reader configured to read the registered information pieces and identifies the object person by computing a similarity between the face information extracted by said extraction device and face information corresponding to the registered persons stored in said storage device.

Claim 17 (Previously Presented): The apparatus according to claim 1, wherein said identification device performs verification for only information pieces at higher-order positions in accordance with the order of sorted information pieces.

Claim 18 (Currently Amended): The apparatus according to claim 17, wherein said identification device performs retry by comparing information present at a lower-order position in said storage device with the specific information piece of the object person when said identification device fails verification between the specific information pieces stored in said storage device and the specific information piece extracted ~~[[aid]]~~ in said extraction device.

Claim 19 (Previously Presented): The apparatus according to claim 17, wherein said identification device calculates a similarity between each of a given number of information pieces read out from said storage device and the specific information piece of the object person to obtain a plurality of similarities, and selects a maximum similarity from the similarities to obtain an identification result.

Claim 20 (Previously Presented): The apparatus according to claim 1, wherein said classification device performs comparison for selected pieces of the sorted information in accordance with the order of the sorted information.

Claim 21 (Previously Presented): The apparatus according to claim 20, wherein said identification device computes a similarity between each of information pieces which are selected by a flag and read out from said storage device and the specific information piece of the object person and outputs an information piece having a maximum similarity as an identification result.

Claim 22 (Previously Presented): The apparatus according to claim 17, wherein said identification device performs retry by collating a feature extracted newly by extraction device with each of features of the specific information pieces read out from storage device when said identification device fails verification between the specific information pieces stored in said storage device and the specific information piece extracted by said extraction device.

Claim 23 (Previously Presented): A personal identification apparatus comprising:
a storage device configured to store a dictionary including specific information pieces of a plurality of registered persons which are arranged in a given order; an extraction device configured to extract a specific information piece from an object person;
an identification device configured to classify whether the object person is a registered person by comparing the specific information piece of the object person the specific information pieces contained in said dictionary; and
a registered information operation device configured to sort the information pieces contained in said dictionary in order of increasing elapse time from a last identification of the object person or in order of decreasing frequency of identification thereof.

Claim 24 (Previously Presented) A personal identification method comprising:
storing specific information pieces of a plurality of registered persons in order storage device;
extracting a specific information piece of an object person from the object person;
identifying the object person by comparing the specific information pieces of the registered persons, with the specific information niece of the object person, and

sorting the specific information pieces of the registered persons in the storage device, in order of increasing elapse time from a last identification of the object person or in order of decreasing frequency of identification thereof.

Claim 25 (Canceled).

Claim 26 (Previously Presented): The method according to claim 24, which includes, when the identifying fails, performing retry operation of the identifying using the specific information piece of the object person, or another specific information piece of the object person, which presents at a lower-order position than the specific information extracted for the object person from the object person.

Claim 27 (Canceled).